# ABSTRACT

Over the past two decades , a number of researchers have concluded that manufacturing matters. The belief that manufacturing is an important ingredient in corporate and national success has spurred the development of manufacturing strategies in firms around the world seeking competitive advantage. However, at this point in time, the linkages between Manufacturing Strategy Process Variables, Manufacturing Strategy Content Variables, Manufacturing Action Plans, Manufacturing Competence, Manufacturing Performance and Economic Performance are poorly understood. Research into winning and losing manufacturing strategies is at an early stage.

Although improved performance is widely claimed as the *raison d'être* for manufacturing strategy, little concrete work has been done in modeling the causal relations between Manufacturing Strategy, Manufacturing Competence and Performance. Two recent studies on performance are promising. Roth et al. and Swamidass et al. offers an empirical study of Performance and Strategy. More research on Performance and its relationship to Manufacturing Competence and Manufacturing Strategy is clearly required.

The purpose of this thesis is twofold. **First**, it is to propose a Causal Model linking the relationships between Strategy Environment (Causal link between Process Variables & Content Variables), Strategy Formulation (Causal Link between Content Variables & Action Plans), Strategy Impact (Causal Link between Action Plans & Competence) and Strategy Performance (Competence & Performance). This is accomplished by developing a path analytic model (the concept being borrowed from social sciences), of various Manufacturing Strategy, Manufacturing Competence and Performance variables. A direction is provided to trace the effect of each Variable to the end effect , the Performance.

The **second** purpose of the work is to do a survey of Indian Industries (in the cities of *Bangalore, Hyderabad, Vishakapatnam & Lucknow*), to provide empirical justification and meaning to the proposed model. Around 203 industries classified as Small/Medium/

Large, were surveyed and a detailed path analysis has been done by using LISREL7. The study was based on a Cross sectional study of the Indian industry, hence reflecting the Short term Causal linkages in Manufacturing Strategy. The significant Strategy Variables in the Indian Context for Small, Medium & Large Industries were identified and all the causal effects were explained in detail. Finally, insights into Winning & Not-So-Winning routes to Enhanced performance in Small, Medium & Large Indian Industries, was provided.

Specific Contributions of the Research work are as follows:

1. Theory building by providing information on various industry segments

2. Provision of a Framework to study the effect of Strategy on Performance

3. Insights into Winning & Not-so-Winning Strategies, in the Indian scenario

4. Empirical verification of Manufacturing Strategy Variables mentioned in literature

5. Detail elucidation of the effect of each variables, on the variable dependent on it

6. Understanding of the causal effects of:

- Strategy Environment: Manufacturing Strategy Process Variables on Manufacturing Strategy Content Variables

- Strategy Formulation: Manufacturing Strategy Content Variables on Manufacturing Strategy Action Plans

- Strategy Impact: Manufacturing Action Plans on Manufacturing performance and hence on Economic Performance

7. Provision of a frame work to develop a DSS for manufacturing Strategy formulation

The effect of Manufacturing Strategy on Manufacturing Competence and hence on Performance has been modeled. The Empirical work provides evidence, regarding the effect of Manufacturing Strategy on Performance and gives an opportunity to trace the effect of each of the specific variables, on Performance. A proliferation of strategy variables exist in industry and it is very difficult to know which would help a particular organization. Practitioners could use this as a tool to guide them in their endeavor of enhanced performance. Researchers could use this frame work to build theory. This thesis paves the way to further research into Manufacturing Strategies.